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09/404,654	09/24/1999	THOMAS MULLER	367.37657X00	8635

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EXAMINER

ABELSON, RONALD B

ART UNIT PAPER NUMBER

2666

DATE MAILED: 02/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/404,654

Applicant(s)

MULLER ET AL.

Examiner

Ronald Abelson

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dy

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 September 1999 and 24 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 67 and 68 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-12, 14, 18, 19, 21, 23-28, 35-38, 40-49, 57-59, 61-66 and 69 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 13, 15-17, 20, 22, 29-34, 39, 50-56 and 60 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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*Claim Objections*

1. Claims 17, 30, 51 are objected to because of the following informalities: For claim 17, line 1, "in" should be replaced with "is". For claims 30 and 51, line 1, "bin" should be replaced with "in". Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 18 recites the limitation "pair of successive groups" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Note, the "pair of successive groups" is found in claim 17, but claim 18 is dependent upon claim 19.

*Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of

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section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 2, 5-12, 14, 19 - 21, 23-28, 35-38, 40-49, 57-59, 61-66, and 69 are rejected under 35 U.S.C. 102(e) as being anticipated by Saka (US 5760699).

Regarding claims 25, 45, 46, 66, 69, a receiver (fig. 1), for synchronizing with a sequence of transmitted messages, each sequence comprises control information including timing information (fig. 1 box 6, 7, 8, fig. 2 SC, Paging, col. 5 lines 11-12, 41-43).

The receiver comprises a control means (fig. 1 box 3, 7, 8) arranged to control the operation of the receiver (reset, col. 5 lines 26-29).

Saka teaches a clock (fig. 1 box 6) for providing a time reference to a control means. The receiver and synchronization means (fig. 1 box 3, 4, 5) responsive, when enabled to the

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control information in a received message to indicate to the control means the reception of the message (fig. 1 box 9, 10, col. 6 lines 7-11), wherein the control means is arranged to disable the receiver and synchronization means for a period of time dependent upon the timing information in the received message (fig. 2b, col. 7 lines 60 - 63) and to enable the receiver the synchronization to receive a following message in the sequence (fig. 1 box 3,6, col. 7 lines 13-15, col. 8 lines 53-56).

Regarding claims 45 and 66, in addition to the limitations previously listed, the receiver comprises a controller (fig. 1 box 3, 7, 8) arranged to control the operation of the receiver (reset, col. 5 lines 26-29).

Regarding claims 46, 66, and 70, in addition to the limitations previously listed, Saka teaches power conservation (battery power saving (col. 7 lines 60-65)).

Regarding claim 69, in addition to the limitations previously listed, Saka teaches each sequence (fig. 2 PAGING, SC code) of intermittent messages are in groups of messages, each group being separated from the next group by a first period of time and including a plurality of messages in series, each

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message in a group being separated from an adjacent message in that group by a second period of time (col. 5 lines 11-17). In addition, Saka teaches control information indicative of a variation in the sequence of intermittent messages / absence of a sync signal, wherein the control means is arranged to disable the receiver and synchronization means for a period of time based on the intermittent sequence, and any variation thereof (fig. 3c, col. 8 lines 25-32).

Regarding claims 26 and 47, the sequence of messages (fig. 2) comprises a sequence of groups of messages each of the groups of messages comprising a plurality of messages in series. The first group contains the PREAMBLE, SC, AND PAGING codes, while the second group contains only the SC AND PAGING codes.

Regarding claims 27 and 48, the following message is a message in a following group (fig. 2, SC, PAGING).

Regarding claims 28 and 49, the following group is the next group (fig. 2, SC, PAGING).

Regarding claim 35, the control means enables the receiver and synchronization means, to receive a following packet in the sequence, for a predetermined duration (fig. 1 box 3, 7, 8).

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Regarding claims 36 and 57, the control means in the absence of an indication from the receiving and synchronizing means that a message has been received, re-enables the receiver and synchronization means, to receive a following packet (col. 8 lines 53-56).

Regarding claims 37 and 58, the re-enablement is controlled for reception of the messages in the following group (col. 8 lines 53-56).

Regarding claims 38 and 59, the control means re-enablement is intermittent, the interval between enablement depending upon the time between messages in the group (col. 8 lines 53-56). Note, the receiver turns on again only after the receiving a preamble code.

Regarding claims 40 and 61, a transceiver comprising a receiver. In mobile communications, the receiver is capable of receiving messages from and transmitting messages to the base station.

Regarding claims 42 and 63, a mobile communications device comprising a receiver (fig. 1).

Regarding claims 43 and 64, an accessory for a mobile communications device comprising a receiver (fig. 1).

Regarding claims 44 and 65, a network comprising transceivers (fig. 1).

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Regarding claims 1, 24, Saka teaches a method and apparatus for a transmitter (fig. 2 device that sent the PREAMBLE, SC and PAGING signals), for transmitting an intermittent sequence of messages to maintain synchronization between the transmitter and at least one receiver (fig. 2 SC and PAGING).

The system comprises a control means (fig. 2 device that arranges the sequence of SC and PAGING) arranged to provide message for transmission, each of the messages forming part of the sequence of messages and comprising control information for effecting synchronization, including timing information (fig. 1 box 7,8), wherein the timing information is dependent upon the transmission of a following message in the sequence it occurs (col. 7 lines 13-23).

The system comprises a transmission means (fig. 2 device that transmitted the sequence to the receiver).

Although Saka is silent on a transmitter, a transmitter is inherent in all wireless system. If a transmitter were not present, then it would not be possible for the receiver to obtain the information.

Regarding claim 24, in addition to the limitations previously listed, a controller. A controller function is



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inherent in a transmitter. There must be a device for controlling the timing of the preamble, paging, and synchronization codes.

Regarding claim 2, the timing information is indicative of the period of time between the transmission of a message containing that timing information and the transmission of a following message in the sequence (col. 5 lines 11-17).

Regarding claim 5, the following message is the next message in the sequence (fig. 2, SC, PAGING).

Regarding claim 6, the preceding message is the directly preceding message (fig. 2, SC, PAGING).

Regarding claim 7, the sequence of messages comprises a sequence of groups of messages each of the groups comprising a plurality of messages (fig. 2, SC, PAGING).

Regarding claim 8, the following message is a message in the following group (fig. 2, SC, PAGING).

Regarding claim 9, the following group is the next group (fig. 2, SC, PAGING).

Regarding claim 10, the following message is the preceding message is a message in a preceding group (fig. 2, SC, PAGING).

Regarding claim 11, the preceding group is the directly preceding group (fig. 2, SC, PAGING).

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Regarding claim 12, the control information identifies the receiver (fig. 2, PREAMBLE, PAGING, SC codes).

Regarding claim 14, the control information comprises a sequence for correlation by the receiver (fig. 1 box 4).

Regarding claim 19, the transmitter of claim 1 is a transceiver. In mobile systems, base station transmitters also receive information from the mobiles.

Regarding claim 20, a computer comprising a transmitter (fig. 2 device that sent the PREAMBLE, SC and PAGING signals).

Regarding claim 21, a mobile communications device comprising a transmitter. A base station is a mobile communications device.

Regarding claim 23, a communications network comprising transceivers. A mobile communications network typically comprises multiple base stations.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

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the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 41 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saka as applied to claims 25 and 46 above, and further in view of Adachi (US 6,256,334).

Saka fails to teach a computer comprising a receiver.

Adachi teaches a computer comprising a receiver (fig. 2, col. 10 lines 3-6).

Therefore it would have been obvious to one of ordinary skill in the art, having both Saka and Adachi before him/her and with the teachings [a] as shown by Saka, a mobile communication network using an intermittent sequence of messages to maintain synchronization, and [b] as shown by Adachi, a computer comprising a receiver, to be motivated to modify the system of Saka by installing the receiver (Saka: fig. 1) within a personal computer. This would improve the system by allowing for mobile data communication.

#### ***Allowable Subject Matter***

8. Claims 67 and 68 allowed.

9. Claims 3, 4, 13, 15 - 17, ~~21~~ 22, 29 - 34, 39, 50 - 56, and 60 are objected to as being dependent upon a rejected base

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claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter.

Regarding claims 3, 4, 16, 30 - 32, 52, 53, nothing in the prior art of the record teaches or fairly suggests a control message containing the time period between the messages, in combination with the other limitations listed in the claim. In contrast, Saka teaches the time period between the SC and PAGING codes is known.

Regarding claim 13, nothing in the prior art of the record teaches or fairly suggests the control messages are broadcast messages, in combination with the other limitations listed in the claim.

Regarding claims 15, 29, 50, nothing in the prior art of the record teaches or fairly suggests control information comprises a value identifying the number of messages in the group, in combination with the other limitations listed in the claim.

Regarding claim 17, 51, nothing in the prior art of the record teaches or fairly suggests varying the amount of time

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between messages, in combination with the other limitations listed in the claim.

Regarding claim 22, nothing in the prior art of the record teaches or fairly suggests an accessory for a mobile communications device comprising a transmitter, in combination with the other limitations listed in the claim.

Regarding claims 39 and 60, nothing in the prior art of the record teaches or fairly suggests comparing the expected time of arrival with the actual time of arrival, in combination with the other limitations listed in the claim.

Regarding claim 67, nothing in the prior art of the record teaches or fairly suggests a control message including control information containing parameters for informing variation in any one or more of the first period of time, the second period of time, and the number of messages in the group, in combination with the other limitations listed in the claim.

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on (703) 308-5463. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

*Ra*  
Ronald Abelson  
Examiner  
Art Unit 2666

*RU*  
\*\*\*

February 6, 2003

*Seema S. Rao*  
SEEMA S. RAO 2/10/03  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2000

**Attachment for PTO-948 (Rev. 03/01, or earlier)**  
**6/18/01**

**The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.**

**INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

**1. Correction of Informalities -- 37 CFR 1.85**

New corrected drawings must be filed with the changes **incorporated** therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

**2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.**

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

**Timing of Corrections**

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.